

1 experience of the user since a change to user information for one Web site will be made for
2 all affiliated Web sites.

3 In sum, the principles of the present invention reduce the amount of user input
4 required when navigating through web sites or when changing user information, and
5 optionally preserves the memory capacity of the client. In addition, the present invention
6 provides a unified experience for the user, as far as inputting user information is
7 concerned, when navigating to affiliated Web sites.

8 The present invention may be embodied in other specific forms without departing
9 from its spirit or essential characteristics. The described embodiments are to be considered
10 in all respects only as illustrative and not restrictive. The scope of the invention is,
11 therefore, indicated by the appended claims rather than by the foregoing description. All
12 changes which come within the meaning and range of equivalency of the claims are to be
13 embraced within their scope.

14 What is claimed and desired to be secured by United States Letters Patent is:

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1 1. In a server that provides cookies associated with web sites for a client, a
2 method for generating for the client one or more cookies associated with a web site based
3 on requirements defined by the web site such that the web site can generate a web
4 document that has been customized for the client, the method comprising the following:

5 transmitting a cookie list to the client, the cookie list including entries
6 associated with web sites, wherein the server is capable of providing cookies
7 associated with said web sites to the client;

8 receiving information from the client indicating that the client is accessing a
9 particular one of the web sites;

10 accessing cookie requirement information specifying the requirements of
11 cookies for the particular web site;

12 generating one or more cookies associated with the particular web site
13 based on the accessed cookie requirement information; and

14 transmitting the one or more cookies to the client such that the client can
15 transmit the one or more cookies to the web site and such that the web site can
16 thereafter transmit to the client a customized web document that has been generated
17 using the one or more cookies.

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19 2. A method as recited in Claim 1, wherein the information received from the
20 client includes a request for one or more cookies corresponding to the particular web site.

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22 3. A method as recited in Claim 1, further comprising, for at least some of the
23 web sites in the cookie list, receiving the cookie requirement information from an
24 administrator of the web site.

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2 4. A method as recited in Claim 1, wherein generating one or more cookies
3 associated with the particular web site based on the accessed cookie requirement
4 information comprises generating one or more cookies associated with the particular web
5 site based on the accessed cookie requirement information and based on user specific
6 information.

7
8 5. A method as recited in Claim 4, further comprising the following:
9 receiving an indication that a user situation has changed; and
10 changing the user specific information to reflect the change in the user
11 situation.

12
13 6. A method as recited in Claim 1, further comprising storing the one or more
14 generated cookies so as to be accessible to the server.

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16 7. A method as recited in Claim 6, further comprising the following:
17 receiving a subsequent indication that the client is again accessing the
18 particular web site; and
19 transmitting the stored one or more cookies to the client in response to
20 subsequent indication, rather than regenerating the one or more cookies.

21
22 8. A method as recited in Claim 1, further comprising the following
23 receiving a subsequent indication that the client is again accessing the
24 particular web site;

1 regenerating the one or more cookies associated with the particular web site
2 based on the accessed cookie requirement information; and
3 transmitting the regenerated one or more cookies to the client.
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1 9. In a server that provides cookies associated with web sites for a client, a
2 method for generating for the client one or more cookies associated with a web site based
3 on requirements defined by the web site such that the web site can generate a web
4 document that has been customized for the client, the method comprising the following:

5 using client information to generate one or more cookies tailored to the
6 information required by a particular web site that the client is to access; and

7 transmitting the one or more cookies to the client such that the client can
8 transmit the one or more cookies to the web site and such that the web site can
9 thereafter transmit to the client a customized web document that has been generated
10 using the one or more cookies.

11
12 10. A method as recited in Claim 9, wherein using client information to
13 generate one or more cookies tailored to the information required by a web site that the
14 client is to access comprises the following:

15 transmitting a cookie list to the client, the cookie list including entries
16 associated with web sites, wherein the server is capable of providing cookies
17 associated with said web sites to the client;

18 receiving information from the client indicating that the client is accessing
19 the particular web site;

20 accessing cookie requirement information specifying the requirements of
21 cookies for the particular web site; and

22 generating one or more cookies associated with the particular web site
23 based on the accessed cookie requirement information.

1 11. A method as recited in Claim 9, further comprising storing the one or more
2 generated cookies so as to be accessible to the server.

3

4 12. A method as recited in Claim 11, further comprising the following:
5 receiving a subsequent indication that the client is again accessing the
6 particular web site; and
7 transmitting the one or more stored cookies to the client in response to
8 subsequent indication, rather than regenerating the one or more cookies.

9

10 13. A method as recited in Claim 9, further comprising the following
11 receiving a subsequent indication that the client is again accessing the
12 particular web site;
13 regenerating the one or more cookies associated with the particular web site
14 based on the accessed cookie requirement information; and
15 transmitting the one or more regenerated cookies to the client.

1 14. A computer program product for use in a server that is to provide cookies
2 associated with web sites to a client, the computer program product for implementing a
3 method for generating for the client one or more cookies associated with a web site based
4 on requirements defined by the web site such that the web site can generate a web
5 document that has been customized for the client, the computer program product
6 comprising a computer-readable medium having stored thereon computer-executable
7 instructions for implementing the following:

8 causing a cookie list to be transmitted to the client, the cookie list including
9 entries associated with web sites, wherein the server is capable of providing
10 cookies associated with said web sites to the client;

11 detecting the receipt of information from the client indicating that the client
12 is accessing a particular one of the web sites;

13 causing cookie requirement information to be accessed specifying the
14 requirements of cookies for the particular web site;

15 generating one or more cookies associated with the particular web site
16 based on the accessed cookie requirement information; and

17 causing the one or more cookies to be transmitted to the client such that the
18 client can transmit the one or more cookies to the web site and such that the web
19 site can thereafter transmit to the client a customized web document that has been
20 generated using the one or more cookies.

21
22 15. The computer program product as recited in Claim 14, wherein the
23 computer-readable medium is a physical storage media.
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1 16. A computer program product as recited in Claim 14, wherein the computer-
2 executable instructions for generating one or more cookies associated with the particular
3 web site based on the accessed cookie requirement information comprise computer-
4 executable instructions for generating one or more cookies associated with the particular
5 web site based on the accessed cookie requirement information and based on user specific
6 information.

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8 17. A computer program product as recited in Claim 16, further comprising
9 computer-executable instructions for implementing the following:

10 detecting the receipt of an indication that a user situation has changed; and
11 changing the user specific information to reflect the change in the user
12 situation.

13

14 18. A computer program product as recited in Claim 14, wherein the computer-
15 readable medium also has stored thereon computer-executable instructions for causing the
16 one or more generated cookies to be stored so as to be accessible to the server.

17

18 19. A computer program product as recited in Claim 18, wherein the computer-
19 readable medium also has stored thereon computer-executable instructions for performing
20 the following:

21 detecting the receipt of a subsequent indication that the client is again
22 accessing the particular web site; and
23 causing the one or more stored cookies to be transmitted to the client in
24 response to subsequent indication, rather than regenerating the one or more

1 cookies.

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3 20. A computer program product as recited in Claim 14, wherein the computer-
4 readable medium also has stored thereon computer-executable instructions for performing
5 the following

6 detecting the receipt a subsequent indication that the client is again
7 accessing the particular web site;

8 regenerating the one or more cookies associated with the particular web site
9 based on the accessed cookie requirement information; and

10 causing the one or more regenerated cookies to be transmitted to the client.

1 21. In a client that is capable of communicating with a server that provides, to
2 the client, cookies associated with web sites and, the client further being capable of
3 communicating with the web sites, a method of obtaining a customized web document
4 from a web site using one or more cookies generated by the server, the method comprising
5 the following:

6 receiving a cookie list from the server, the cookie list including entries
7 associated with the web sites, wherein the server is capable of providing cookies
8 associated with the web site to the client;

9 initiating a connection to a particular web site;

10 determining that the particular web site is associated with an entry in the
11 cookie list;

12 requesting, from the server, one or more cookies associated with the
13 particular web site; and

14 receiving, from the server, the one or more cookies associated with the
15 particular web site, the one or more received cookies having been generated by the
16 server based on cookie requirement information specifying the requirements of
17 cookies for the particular web site.

18
19 22. A method as recited in Claim 21, further comprising the following;

20 transmitting the one or more received cookies to the particular web site; and
21 receiving from the particular web site a customized web document that has
22 been generated at the web site using the one or more received cookie.

23
24 23. A method as recited in Claim 21, wherein the acts of requesting the one or

1 more cookies and receiving the one or more cookies are conducted without the client
2 transmitting to the server any client information that is to be included in the one or more
3 cookies.

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5 24. A method as recited in Claim 21, wherein accessing the particular web site
6 is being conducted for the first time, such that receiving the one or more cookies is
7 conducted as the client accesses the particular web site for the first time.

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- 1 25. In a client that is capable of communicating with a server that provides, to
2 the client, cookies associated with web sites and, the client further being capable of
3 communicating with the web sites, a method of obtaining a customized web document
4 from a web site using one or more cookies generated by the server, the method comprising
5 the following:
6 assisting the server so that if the client is to access a particular web site, the
7 server transmits to the client one or more cookies associated with the web site; and
8 receiving, from the server, the one or more cookies associated with the
9 particular web site, the one or more received cookies having been generated by the
10 server based on cookie requirement information specifying the requirements of
11 cookies for the particular web site.
12
13 26. A method as recited in Claim 25, wherein accessing the particular web site
14 is being conducted for the first time, such that receiving the one or more cookies is
15 conducted as the client accesses the particular web site for the first time.
16
17 27. A method as recited in Claim 25, further comprising the following:
18 transmitting the one or more received cookies to the particular web site; and
19 receiving from the particular web site a customized web document that has
20 been generated at the web site using the one or more received cookies.
21
22 28. A method as recited in Claim 25, wherein assisting the server further
23 comprises the following:
24 receiving a cookie list from the server, the cookie list including entries

1 associated with the web sites, wherein the server is capable of providing cookies
2 associated with the web site to the client;

3 initiating a connection to a particular web site, determining that the
4 particular web site is associated with an entry in the cookie list; and

5 requesting, from the server, one or more cookies associated with the
6 particular web site.

7
8 29. A method as recited in Claim 28, wherein requesting the one or more
9 cookies and receiving the one or more cookies are conducted without the client
10 transmitting to the server any client information that is to be included in the one or more
11 cookies.

1 30. A computer program product for use in a client that is configured to
2 communicate with a server that is to provide, to the client, cookies associated with web
3 sites and, the client further being capable of communicating with the web sites, the
4 computer program product for implementing a method of obtaining a customized web
5 document from a web site using one or more cookies generated by the server, the computer
6 program product comprising a computer-readable medium having stored thereon
7 computer-executable instructions for implementing the following:

8 detecting the receipt of a cookie list from the server, the cookie list
9 including entries associated with the web sites, wherein the server is capable of
10 providing cookies associated with the web site to the client;

11 initiating a connection to a particular web site;

12 determining that the particular web site is associated with an entry in the
13 cookie list;

14 requesting, from the server, one or more cookies associated with the
15 particular web site; and

16 detecting the receipt, from the server, of the one or more cookies associated
17 with the particular web site, the one or more received cookies having been
18 generated by the server based on cookie requirement information specifying the
19 requirements of cookies for the particular web site.

20
21 31. A computer program product as recited in Claim 30, wherein the computer-
22 readable medium comprises a physical storage medium.

23
24 32. A computer program product as recited in Claim 30, further comprising the

1 following;

2 causing the one or more received cookies to be transmitted to the particular
3 web site; and

4 detecting the receipt, from the particular web site, of a customized web
5 document that has been generated at the web site using the one or more received
6 cookies.

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